

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03055				SHEET 1 OF 1	
	DWG NO. 41228-203-049		REV: F	PREPARED BY J. GARDINER	DATE: 02/03/11	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.
	DWG TITLE: INSTALLATION LIGHTNING GUARD					
	APPROVED BY: ENGR <i>T. Brown</i>	MFG <i>Dave Parker</i>	QC <i>Marcel Legau</i>	EFF: CURRENT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISE QTY OF F/N 1-3					

3	R	41228-203-050-005	2	2	STRAP		
2	R	41228-203-050-003	1	1	STRAP		
1	R	41228-203-050-001	9	9	STRAP		
F/N	TC	PART NUMBER	-003 QTY	-001	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input checked="" type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

1 2 3 4 5 6 7 8

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED SECTION M-M TO SHT 4 OF 6, SHOW DRAIN HOLE ON FAIRING ON SECTION J-J, K-K & L-L ON SHT 5 OF 6. SHOW AREA ON DETAIL-D FOR CONDUCTIVE COATING TO BE EXPOSED ON SHT 6 OF 6.	08-12-93	
B	REVISED NOTE 2, ADDED DETAIL N TO SHT 6 OF 6	11-09-93	
C	GENERAL UPDATE	04-04-94	
D	INCORPORATED E.O.'S D-1 & D-2.	12-14-95	D. MARWILL
E	ADDED -003 INSTALLATION; ADDED SECTION O-O; MOVED SECTION H-H TO SHT 4; MOVED ACCESS COVER INSTL DETAIL TO SHT 5; ADDED 2ND SECTION J-J TO SHT 5 FOR 41228-200-006-001/-002 TANKS.	12-14-95	J.A. PLUMER
F	INCORPORATED ECN 01919 & 02999	11-17-10	P. BRAVO

- 14 RENO NEVADA
- 13 DELKER BRANFORD CT.
- 12 SPRAYLAT, MOUNT VERNON, NY.
- 11 ALT P/N A3135-017-24A / TRI-STAR AEROSPACE INC., FT. WORTH, TX.
- 10 (41228-200-006-001/-002 TANKS)
- 9 (41228-200-004-001/-002 & 41228-200-005-001/-002 TANKS)
- 8 USE MS20427M3-X AS ACCEPTABLE ALTERNATIVE USING RIVET GRIP GUIDELINES OF AC 43-13, AS REQUIRED.
- 7 INSTALL EXPANDED FOIL IN ACCORDANCE WITH ERA PROCESS SPECIFICATION No. 4011.
- 6 DRY FILM THICKNESS TEST. MASK OFF DATA PLATE WITH ALUMINUM TAPE. APPLY ANOTHER LAYER OF ALUMINUM TAPE TO HALF THE SURFACE OF DATA PLATE AFTER APPLICATION OF CONDUCTIVE COATING CAREFULLY REMOVE BOTH LAYERS. MEASURE NON COATED ALUMINUM TAPE & TAPE WITH CONDUCTIVE COATING.
- 5 FINISH IN ACCORDANCE WITH ERA PROCESS SPECIFICATION No. 4009
- 4 APPLY LIGHTNING GUARD IN ACCORDANCE WITH ERA PROCESS SPECIFICATION No. 4008.
- 3 PRIME TANK SHELL IN ACCORDANCE WITH ERA PROCESS SPECIFICATION 4004 USING A PRIMER CONFORMING TO MIL-P-53022. MASK OFF ALL GROUNDING STRAPS AS LISTED ON SHT. 2 & 3 OF 6 BEFORE PRIMING. REMOVE ALL MASKING FROM GROUNDING STRAPS BEFORE APPLICATION OF CONDUCTIVE COATING TO PROVIDE A POSITIVE GROUND FOR CONDUCTIVE COATING.
- H. VISUALLY INSPECT GROUNDING STRAP FOR PROPER BONDING. ⑥
- G. LET SET AT ROOM TEMPERATURE FOR AT LEAST 30 MINUTES BEFORE TOOL IS REMOVED, LET SET 24 HOURS BEFORE COATING WITH PAINT OR PRIMER.
- F. INSTALL GROUNDING STRAP ONTO TANK AND HOLD IN POSITION: CLEAN ALL EXCESS BONDING MATERIAL FROM TANK AND GROUNDING STRAP.
- E. COMPLETELY COVER BONDING AREA OF GROUNDING STRAP & TANK.
- D. MIX CLICK BOND CB-200 PER MANUFACTURES INSTRUCTIONS.
- C. CLEAN GROUNDING STRAP & TANK WITH ACETONE IN AREA OF BONDING.
- B. BEAD-BLAST BACK SIDE OF GROUNDING STRAP.
- A. SAND TANK SHELL AT GROUNDING STRAP CONTACT POINT LOCATION.
- 1 BEFORE BONDING GROUNDING STRAP TO TANK FORM GROUNDING STRAP TO FIT CONTOUR OF TANK SHELL

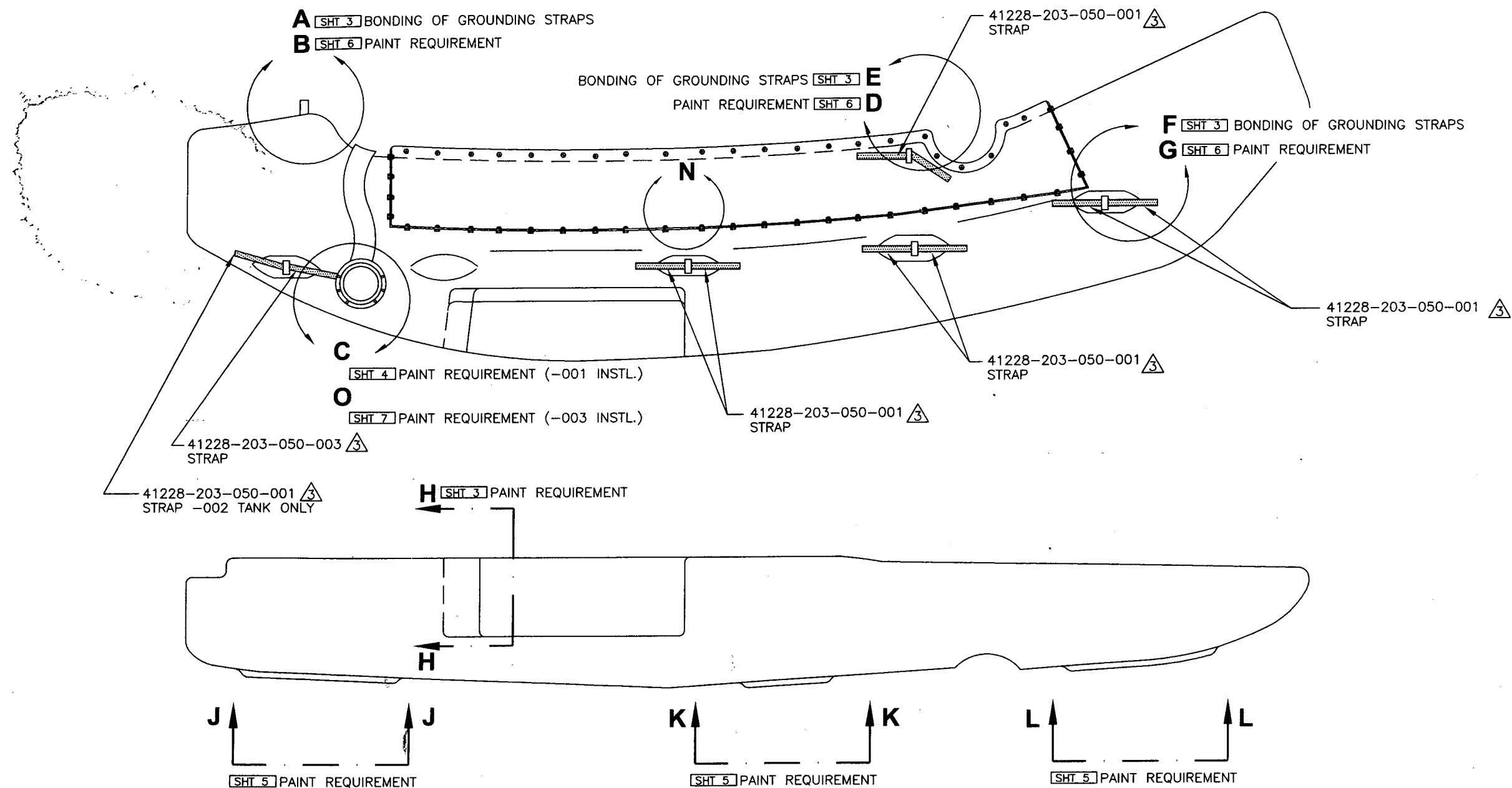
NOTES:

UNINCORPORATED ECN(s)

03055

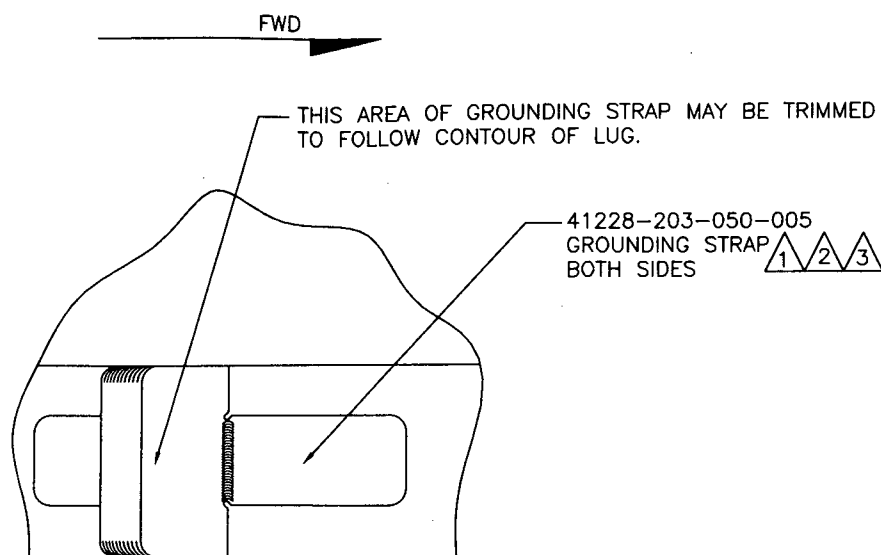
		AR	AR	10	CB-200	CLICK BOND		14
			AR	9	5CU7-125	EXPANDED FOIL FLATTENED & ANNEALED		13
		AR	AR	8	599-A8574-1	LIGHTNING GUARD		12
				12	7 MS24694S4	SCREW		
				8	6 MS20427M3-4	RIVET		8
				4	5 CCR-264S/S3-3	RIVET		
				12	4 3135-017-935	WASHER		11
		4	4	3	41228-203-050-005	STRAP		
		2	2	2	41228-203-050-003	STRAP		
		18	18	1	41228-203-050-001	STRAP		
					-003	INSTL.		10
					-001	INSTL.		9
		-003	-001	FIND No.	PART No.	DESCRIPTION	MAT'L	SPEC
QTY REQ'D					PARTS LIST			
NEXT ASSY(S)					ORIGINAL DATE (MO-DA-YR)	07-19-93	 2000 TEMPLE HEIGHTS DR. OCCOGEON, CA 92080-3012 (760) 724-6300	
41228-200-006					DRAWN BY	T. HARVILLE		
41228-200-005					CHECKER			
41228-200-004					DRAWING APPROVAL			
					CONTRACT No.		INSTALLATION LIGHTNING GUARD	
					UNLESS OTHERWISE SPECIFIED			
					SIZE CAGE CODE DWG. No.			
					TOLERANCES ON:		REV	
					2 PLACE DECIMALS ± .03		B	07M26
					3 PLACE DECIMALS ± .010		41228-203-049	F
					ANGLES ± .5°		SCALE	NONE
							SHEET 1 of 8	

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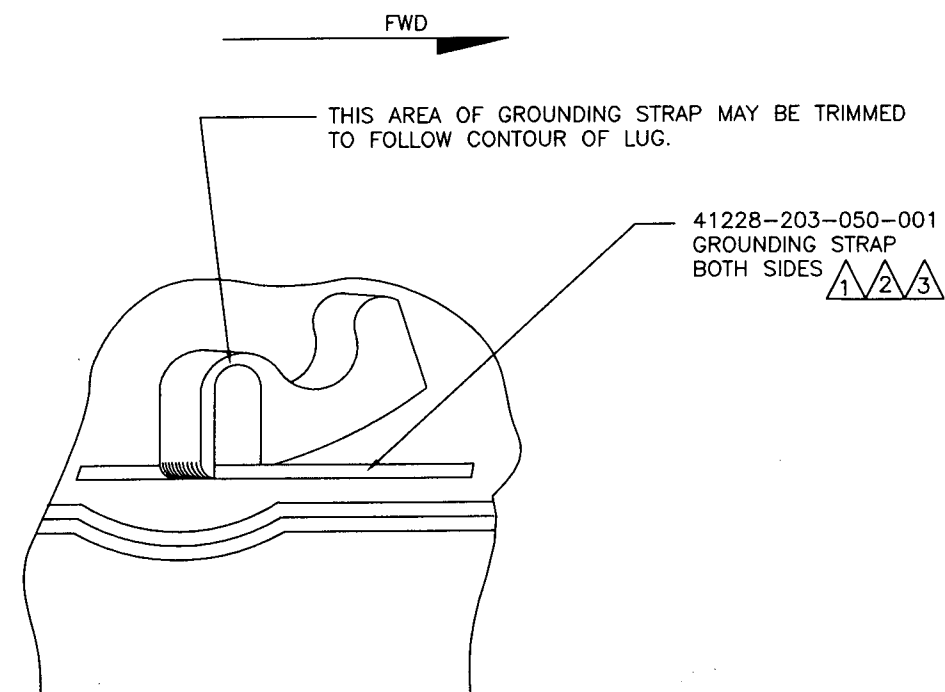
ORIGINAL DATE (MO-DA-YR) 07-19-93		APICAL INDUSTRIES, INC. 3800 TEMPLE HEIGHTS DR. OCEANOGRAPHY, CA 92058-3712 (760) 724-6300			
DRAWN BY T. HARVILLE					
CHECKER					
DRAWING APPROVAL		CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± .5°		SIZE B	CAGE CODE 07M26	DWG. No. 41228-203-049	REV F
SCALE NONE		SHEET 2 of 8			

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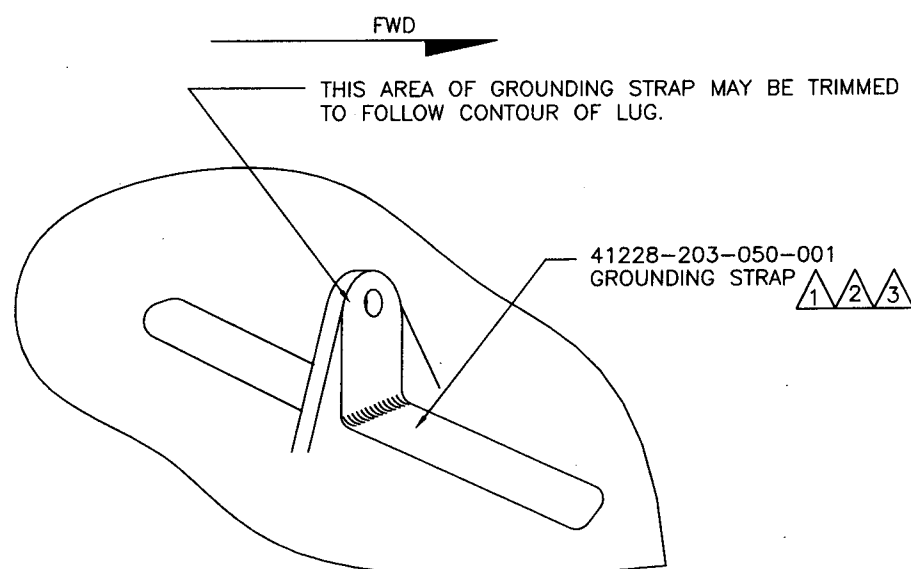
DETAIL - A

VIEW LOOKING OUTBOARD AT FWD LUG




DETAIL - E

VIEW LOOKING OUTBOARD AT AFT LUG



DETAIL - F

VIEW LOOKING DOWN AT UPPER LUG
TYP. INSTALLATION OF GROUNDING STRAP
ON UPPER LUG

ORIGINAL DATE (MO-DA-YR) 07-19-93	 2000 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92058-3012 (760) 724-0300		
DRAWN BY T. HARVILLE			
CHECKER	CONTRACT No.		
DRAWING APPROVAL			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 1 PLACE DECIMALS ± .03 2 PLACE DECIMALS ± .010 ANGLES ± .5°			
SIZE B	CAGE CODE 07MZ6	DWG. No. 41228-203-049	REV F
SCALE NONE			SHEET 3 of 8

1 2 3 4 5 6 7 8

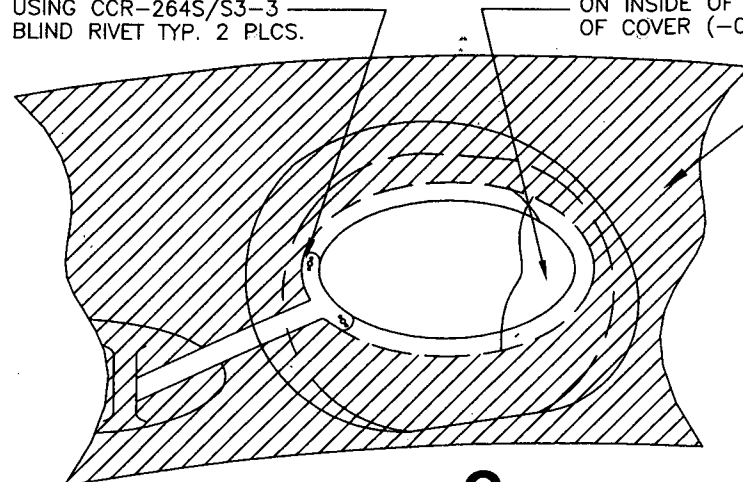
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A B

ATTACH STRAP & NUT PLATE TO FAIRING USING CCR-264S/S3-3 BLIND RIVET TYP. 2 PLCS.

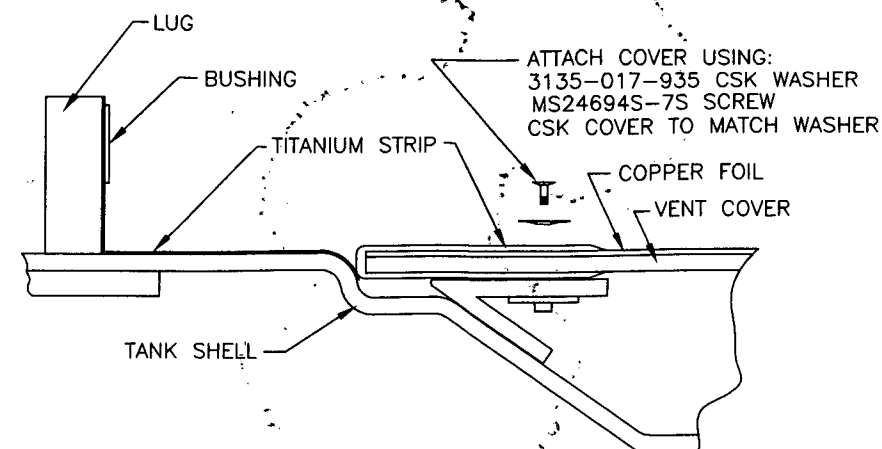
DO NOT COVER TANK SHELL ON INSIDE OF FAIRING OR INSIDE OF COVER (-001 INSTL.)

COVER TANK SHELL WITH LIGHTNING GUARD INCLUDING VENT FAIRING & COVER. (-001 INSTL.)



DETAIL - C

VIEW LOOKING DOWN AT VENT VALVE LOCATION



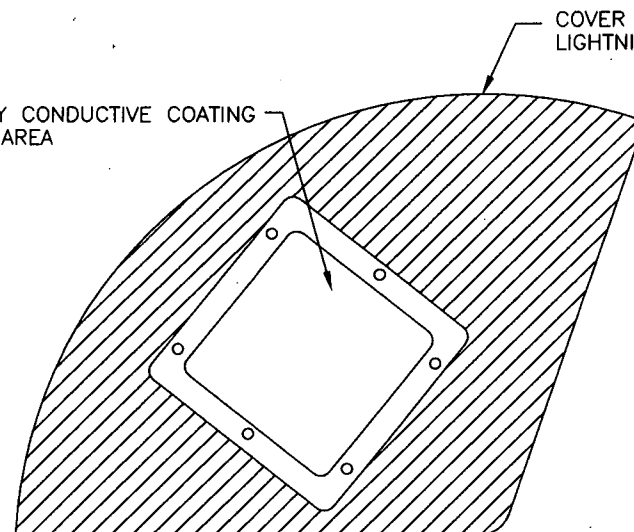
SECTION M-M

BONDING REQUIREMENTS OF VENT COVER (-001 INSTL.)

C D

DO NOT APPLY CONDUCTIVE COATING IN RECESSED AREA

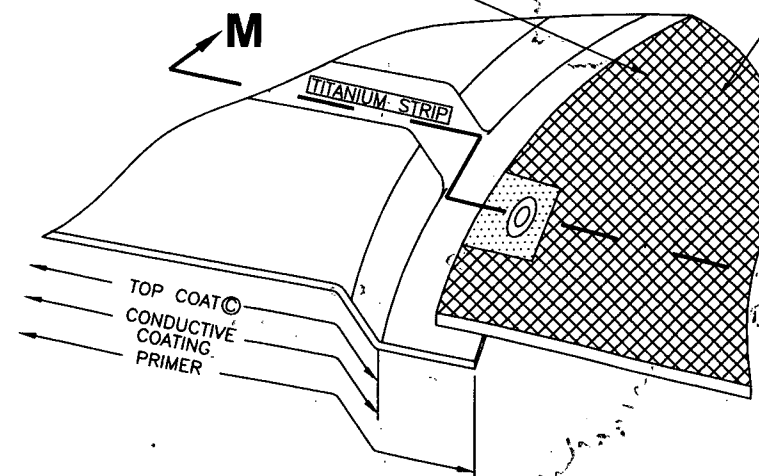
COVER TANK SHELL WITH LIGHTNING GUARD



SECTION H-H (E)

VIEW LOOKING FWD AT STEP LIGHT CAVITY

NO CONDUCTIVE COATING ON COVER



5CU7-125 FLATTENED & ANNEALED EXPANDED FOIL

TYPICAL APPLICATION OF PRIMER & CONDUCTIVE COATING ON VENT FAIRING (-001 INSTL.)

ORIGINAL DATE (MO-DA-YR) 07-19-93
DRAWN BY T. HARVILLE
DRAWING APPROVAL
CONTRACT No.

APICAL INDUSTRIES, INC.
2800 TEMPLE HEIGHTS DR.
OCEANOGRAPHY, CA 90266-3012 (760) 784-0300

INSTALLATION LIGHTNING GUARD

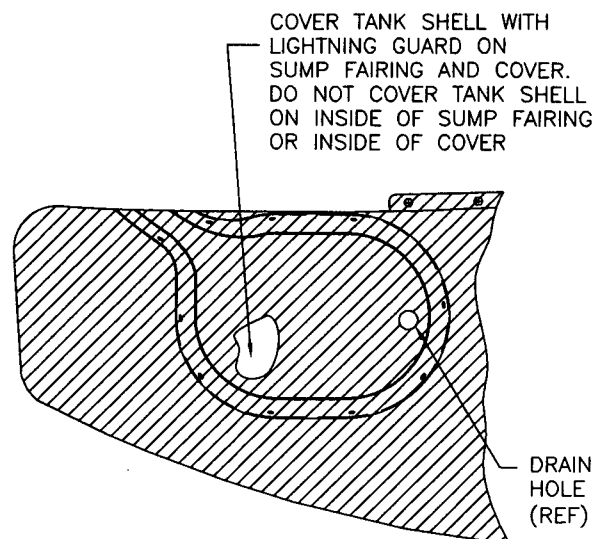
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
2 PLACE DECIMALS ± .03
3 PLACE DECIMALS ± .010
ANGLES ±

SIZE B CAGE CODE 07M26 DWG. No. 41228-203-049 REV F

SCALE NONE SHEET 4 of 8

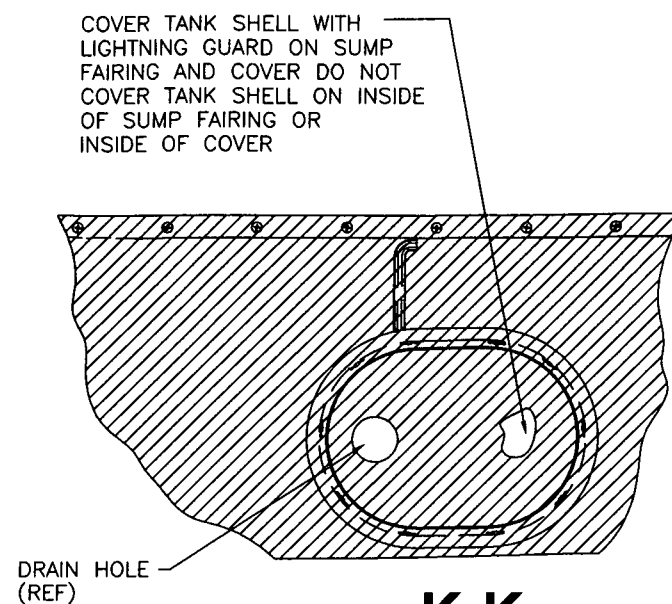
1 2 3 4 5 6 7 8

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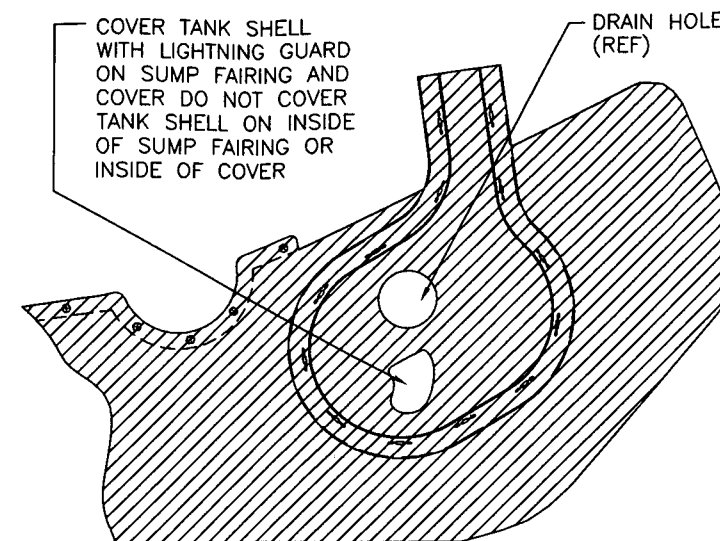
SECTION J-J

VIEW LOOKING UP AT **CROSS FEED** FAIRING & COVER (41228-200-004-001 & -002 TANKS, & 41228-200-005-001 & -002 TANKS)



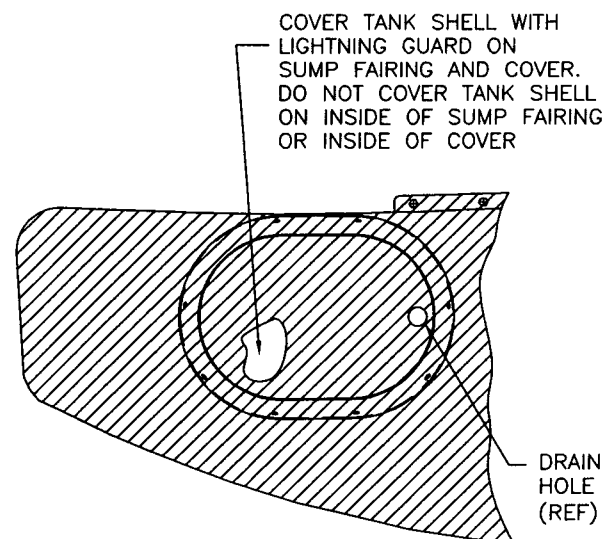
SECTION K-K

VIEW LOOKING UP AT SUMP FAIRING & COVER



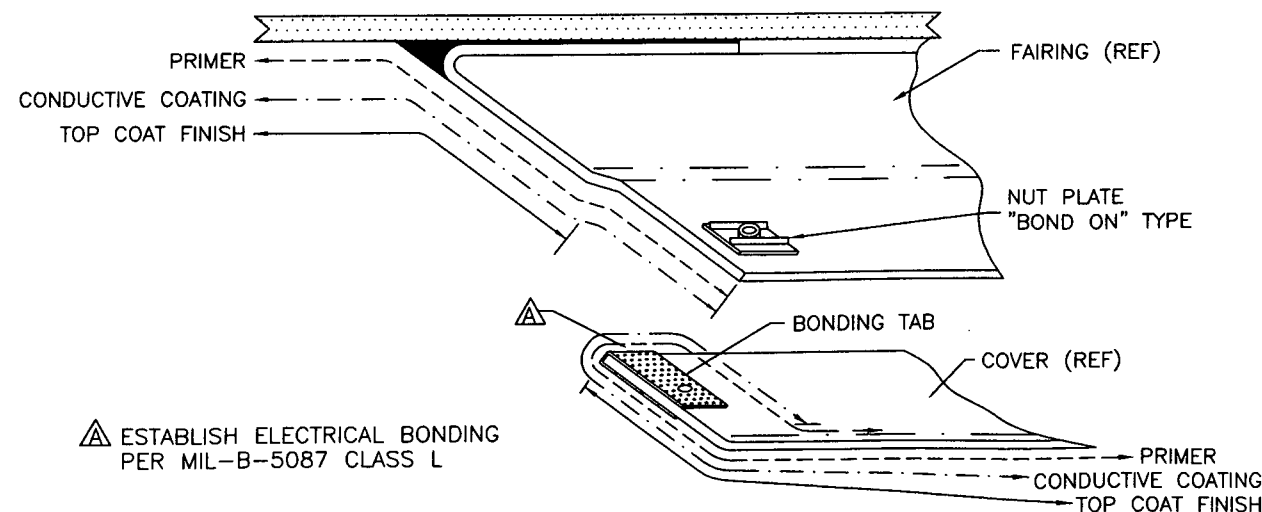
SECTION L-L

VIEW LOOKING UP AT FUEL RETURN FAIRING & COVER



SECTION J-J

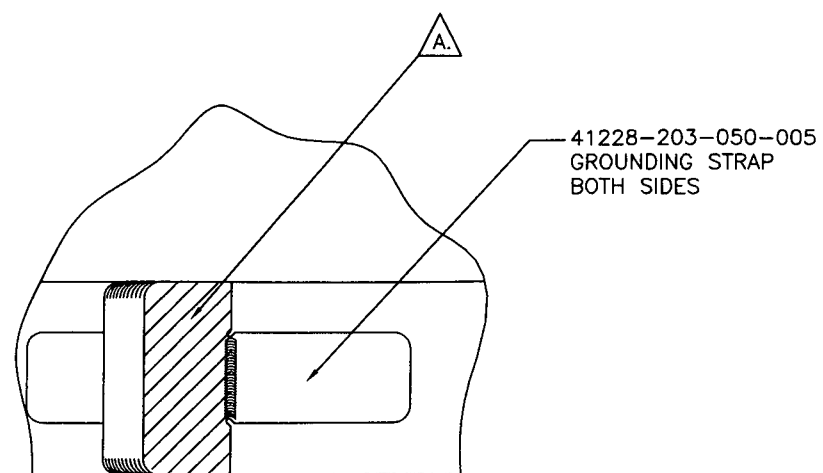
VIEW LOOKING UP AT **VENT PLATE** FAIRING & COVER (41228-200-006-001 & -002 TANKS,



ⓔ TYPICAL INSTALLATION FOR ALL LOWER ACCESS COVERS

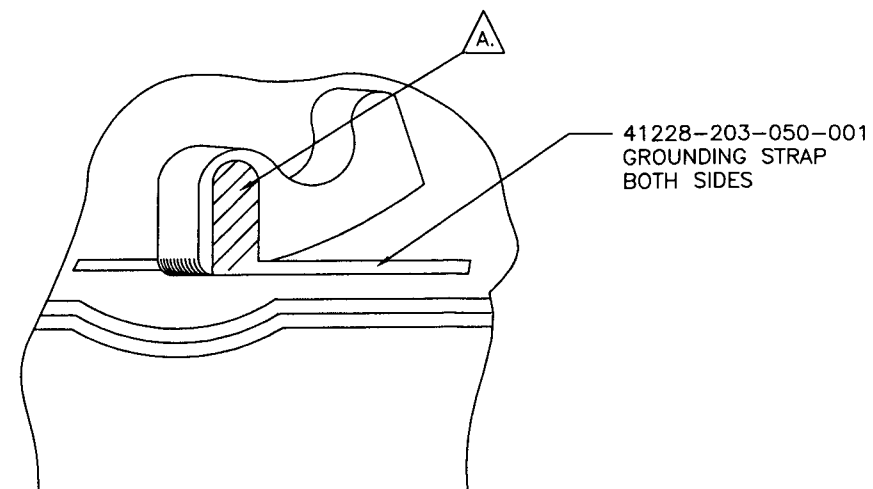
ORIGINAL DATE 07-19-93		DRAWN BY T. HARVILLE		CHECKER	
DRAWING APPROVAL		CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± .5°					
APICAL INDUSTRIES, INC. 2800 TEMPLE HEIGHTS DR. OCCOGEON, GA 30204-3012 (770) 764-6300		INSTALLATION LIGHTNING GUARD		REV F	
SIZE B	CAGE CODE 07M26	DWG. No. 41228-203-049	SHEET 5 of 8		
SCALE NONE					

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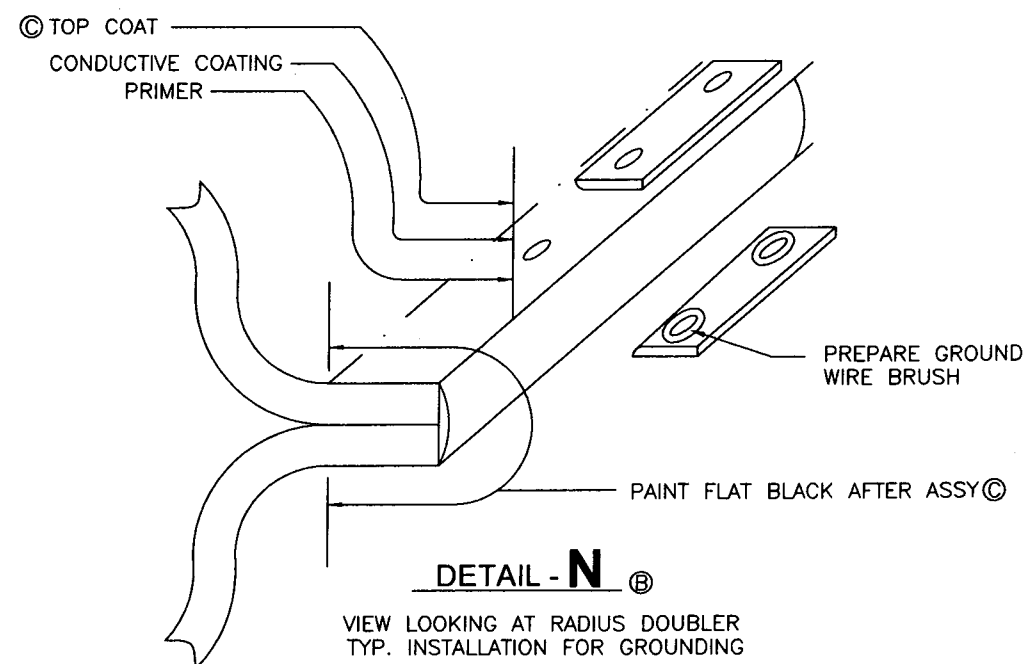
DETAIL - B

VIEW LOOKING OUTBOARD AT FWD LUG



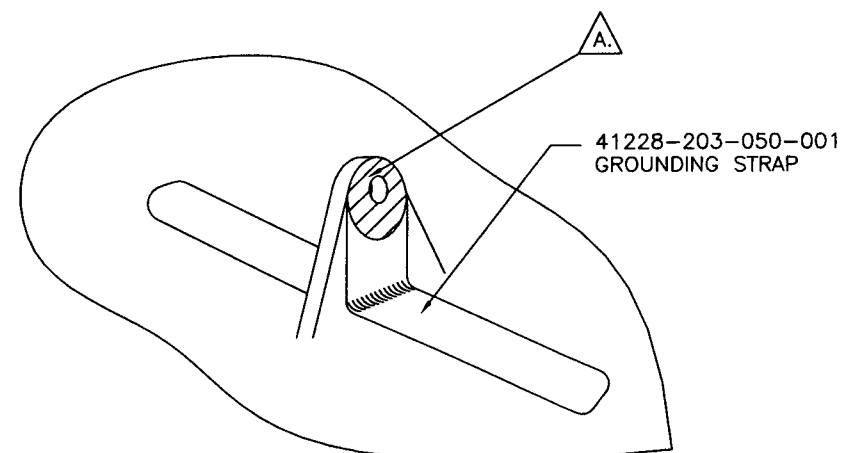
DETAIL - D

VIEW LOOKING OUTBOARD AT AFT LUG



DETAIL - N

VIEW LOOKING AT RADIUS DOUBLER
TYP. INSTALLATION FOR GROUNDING




DETAIL - G

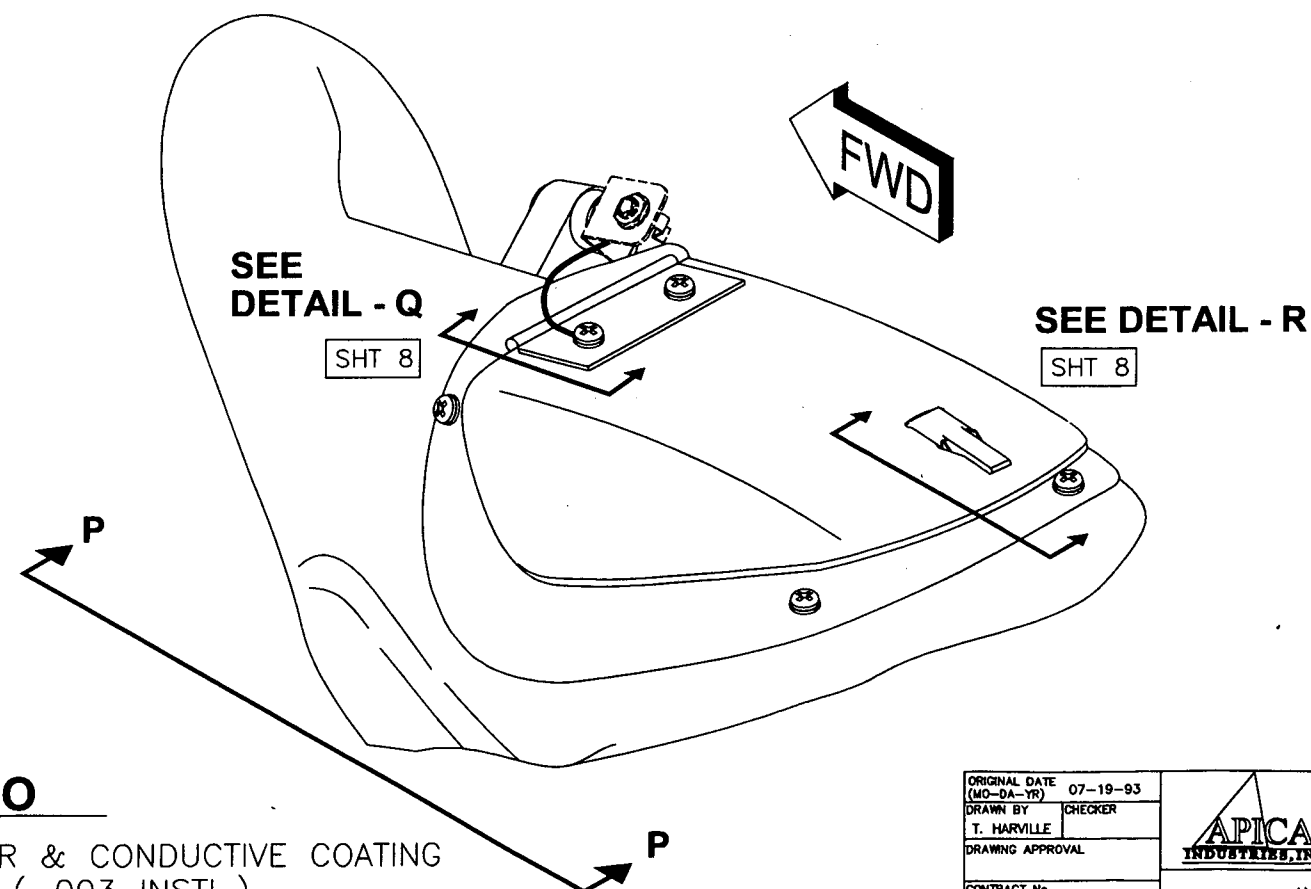
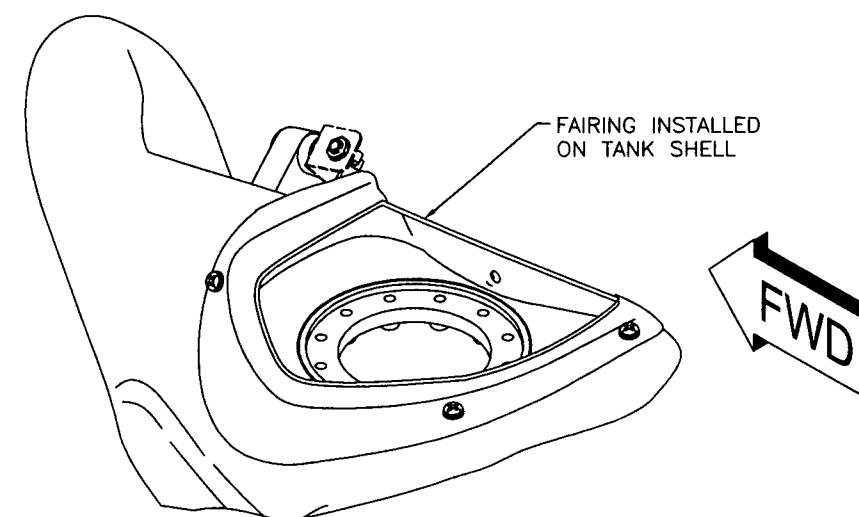
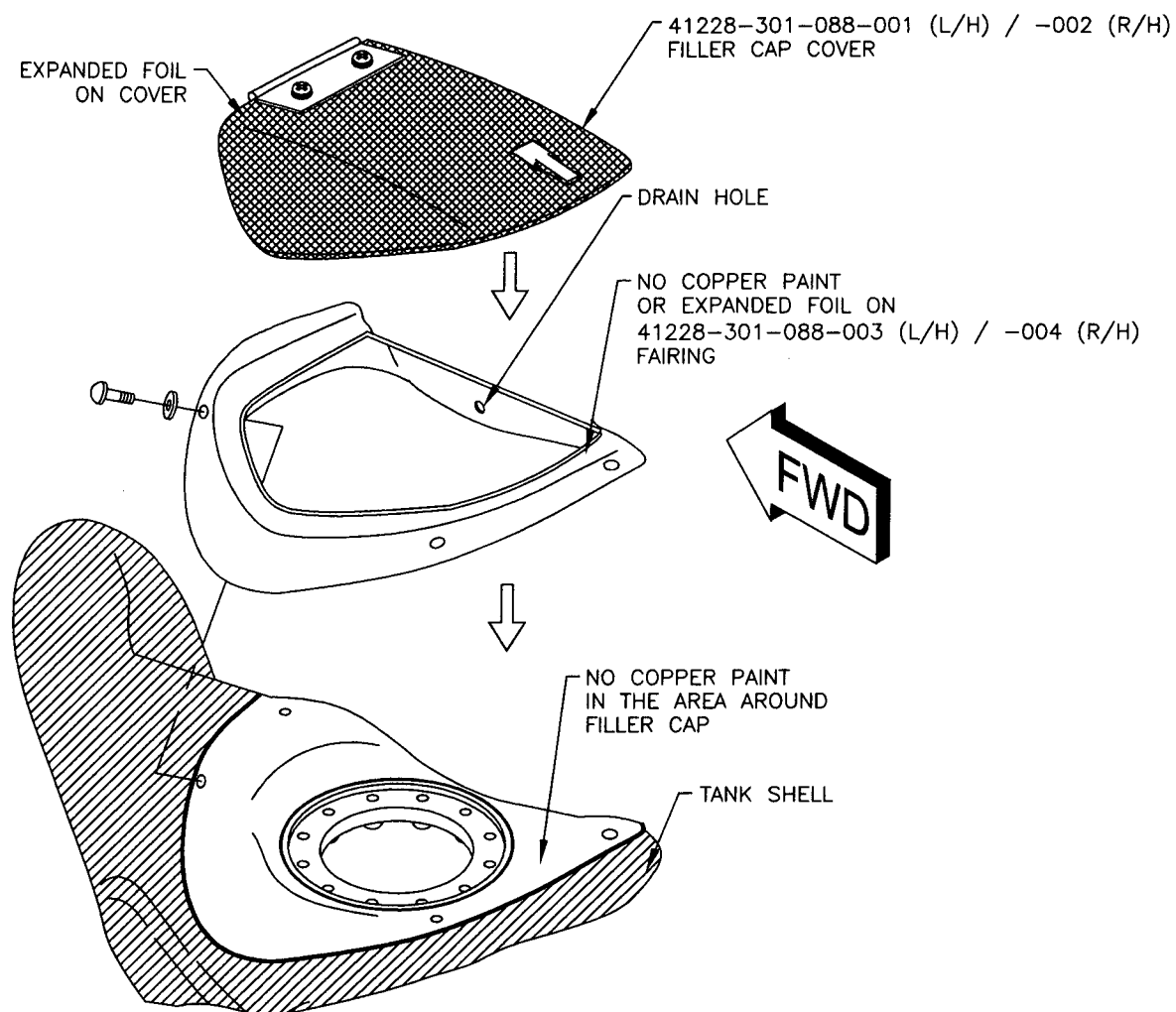
VIEW LOOKING DOWN AT UPPER LUG
TYP. INSTALLATION OF GROUNDING STRAP
ON UPPER LUG

NOTE:

A. CONDUCTIVE COATING TO BE EXPOSED IN AREAS SHOWN—
DO NOT APPLY ANY FINISH COAT OR NON CONDUCTIVE
COVERING TO THESE SURFACES.

ORIGINAL DATE (MO-DA-YR) 07-19-93		 <small>2000 TOWLE HEIGHTS DR. OCEANSIDE, CA 92050-3512 (760) 724-6300</small>			
DRAWN BY T. HARVILLE					
DRAWING APPROVAL		CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± 5°		SIZE B	CAGE CODE 07M26	DWG. No. 41228-203-049	REV F
SCALE NONE		SHEET 6 of 8			

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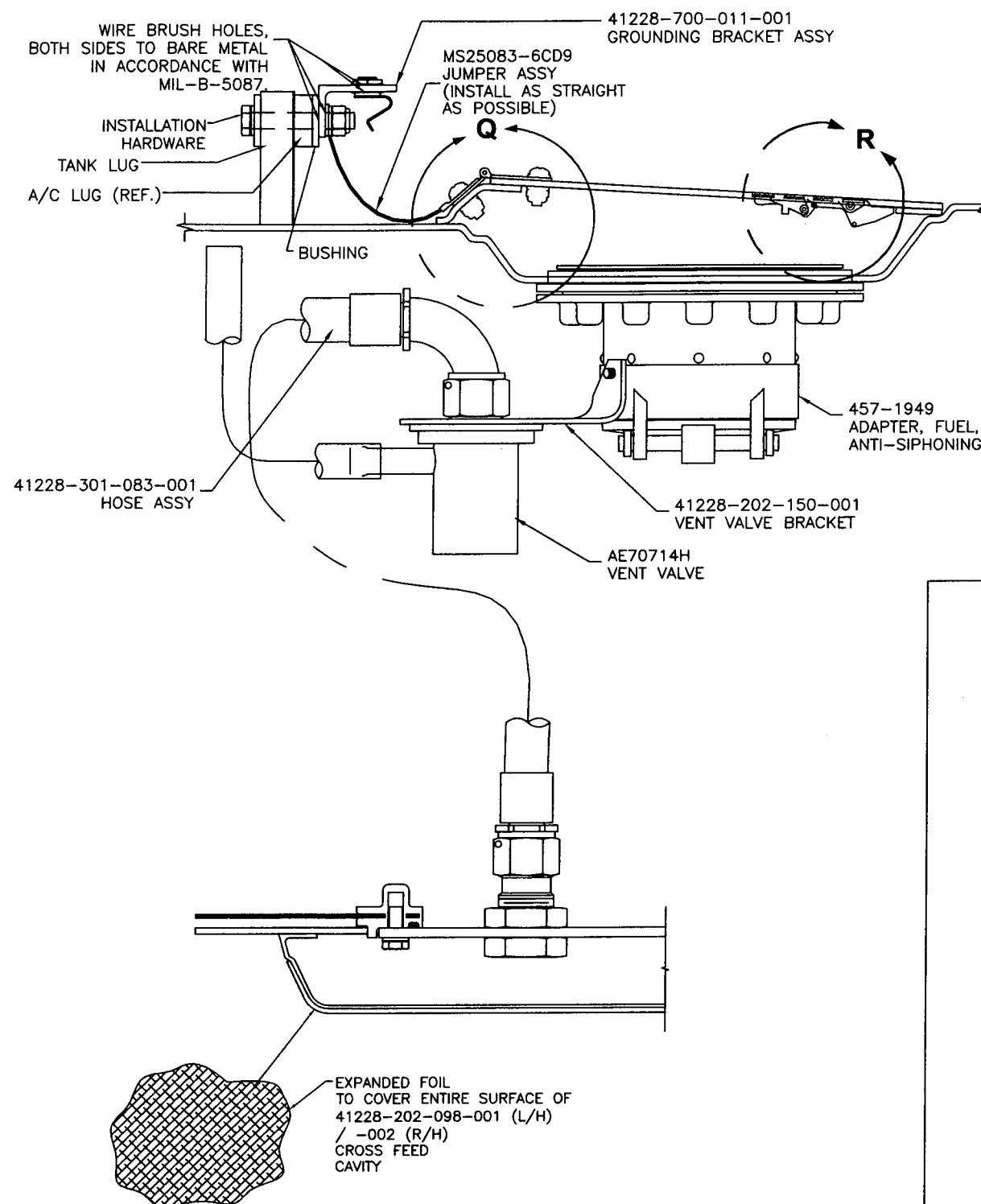


DETAIL O

TYPICAL APPLICATION OF PRIMER & CONDUCTIVE COATING
ON FUEL CAP AREA (-003 INSTL.)

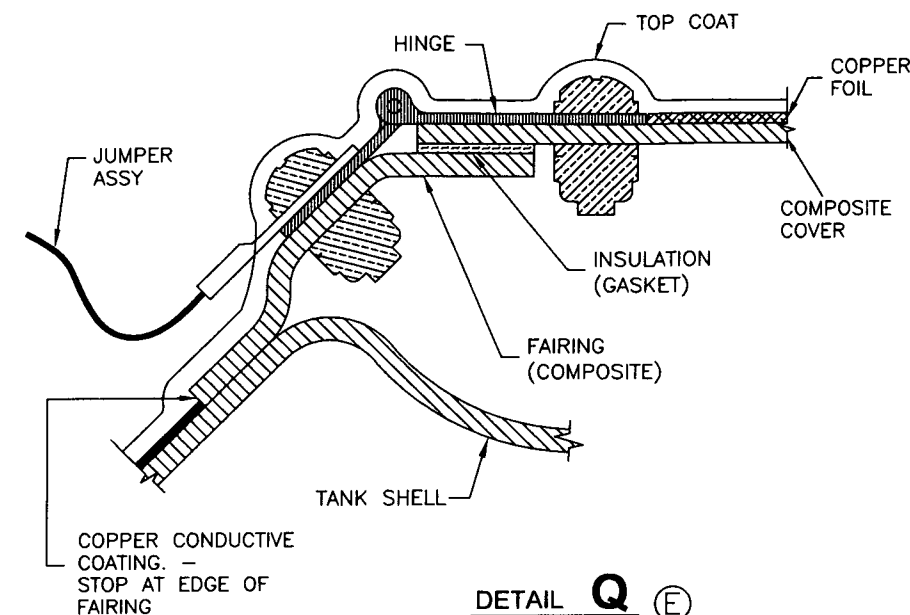
ORIGINAL DATE (MO-DA-YR) 07-19-93		 2800 TEMPLE HEIGHTS DR. OCCOGEON, CA 95030-3012 (714) 724-0300			
DRAWN BY T. HARVILLE					
DRAWING APPROVAL		CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± .5°		SIZE B	CAGE CODE 07M26	DWG. No. 41228-203-049	REV F
SCALE NONE		SHEET 7 of 8			

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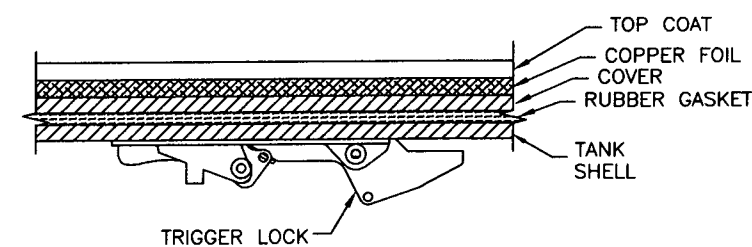


SECTION P-P (E)

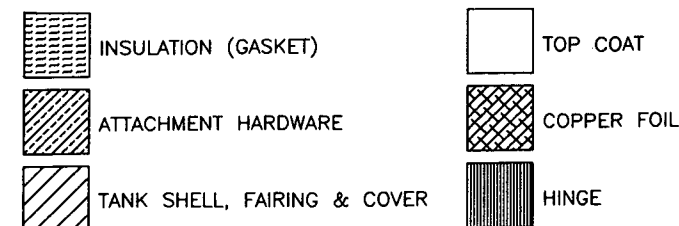
BONDING REQUIREMENTS OF FUEL CAP AREA (-003 INSTL.)



DETAIL Q (E)
(BONDING REQUIREMENTS OF HINGE OF FUEL CAP COVER.)



DETAIL R (E)
(BONDING REQUIREMENTS OF TRIGGER LOCK ON FUEL CAP COVER.)



ORIGINAL DATE (MO-DA-YR) 07-19-93		 2800 TOPPLE HEIGHTS DR. OCEANIDE, CA 92058-3012 (714) 724-8300	
DRAWN BY T. HARVILLE	CHECKER		
DRAWING APPROVAL		CONTRACT No.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± .5°		SIZE B	CAGE CODE 07M26 DWG. No. 41228-203-049 REV F
SCALE NONE		SHEET 8 of 8	